

(No Model.)

M. R. MAHER.

SELF SEALING BUNG FOR ICE CREAM FREEZERS.

No. 410,800.

Patented Sept. 10, 1889.

Fig. 1.

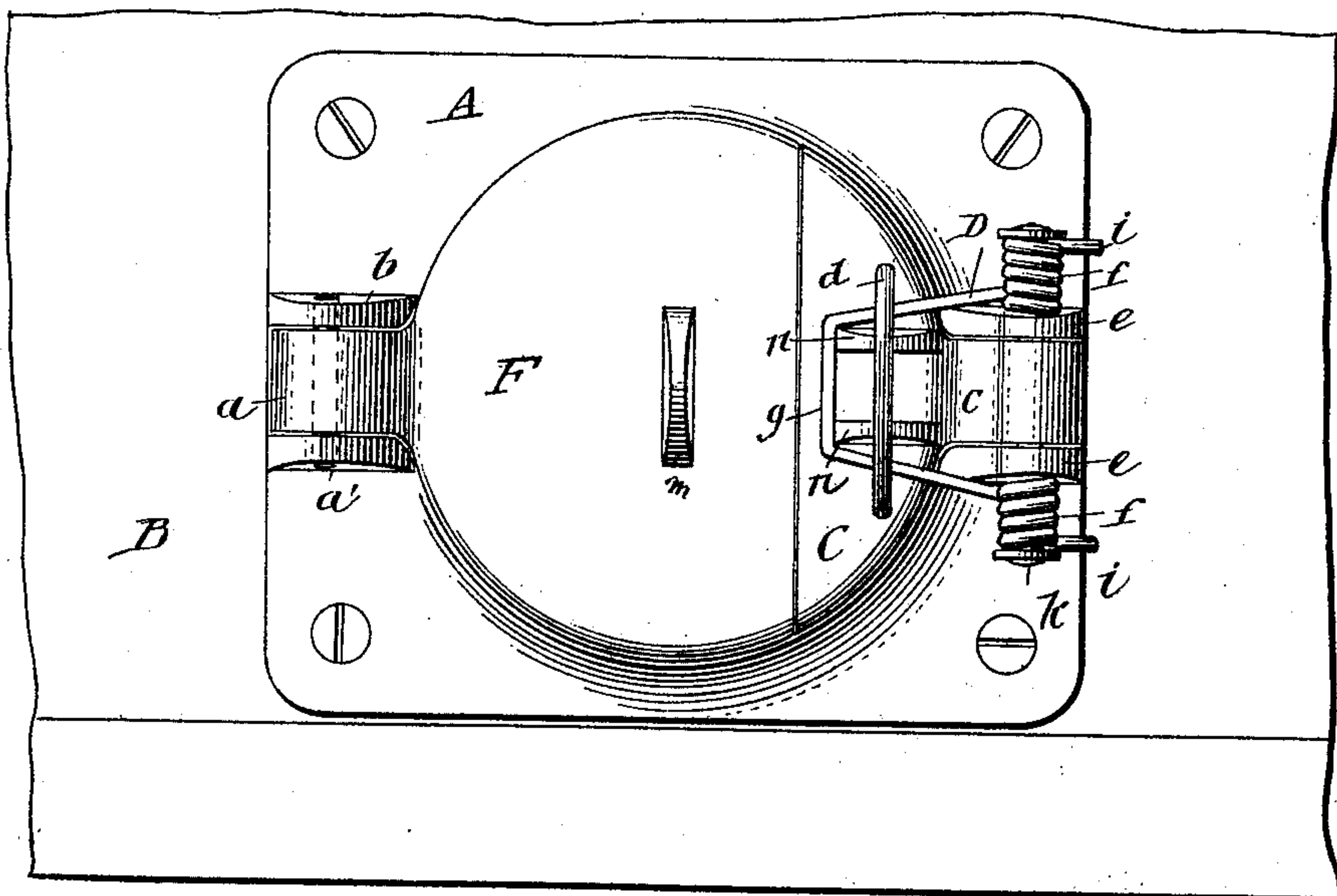


Fig. 2.

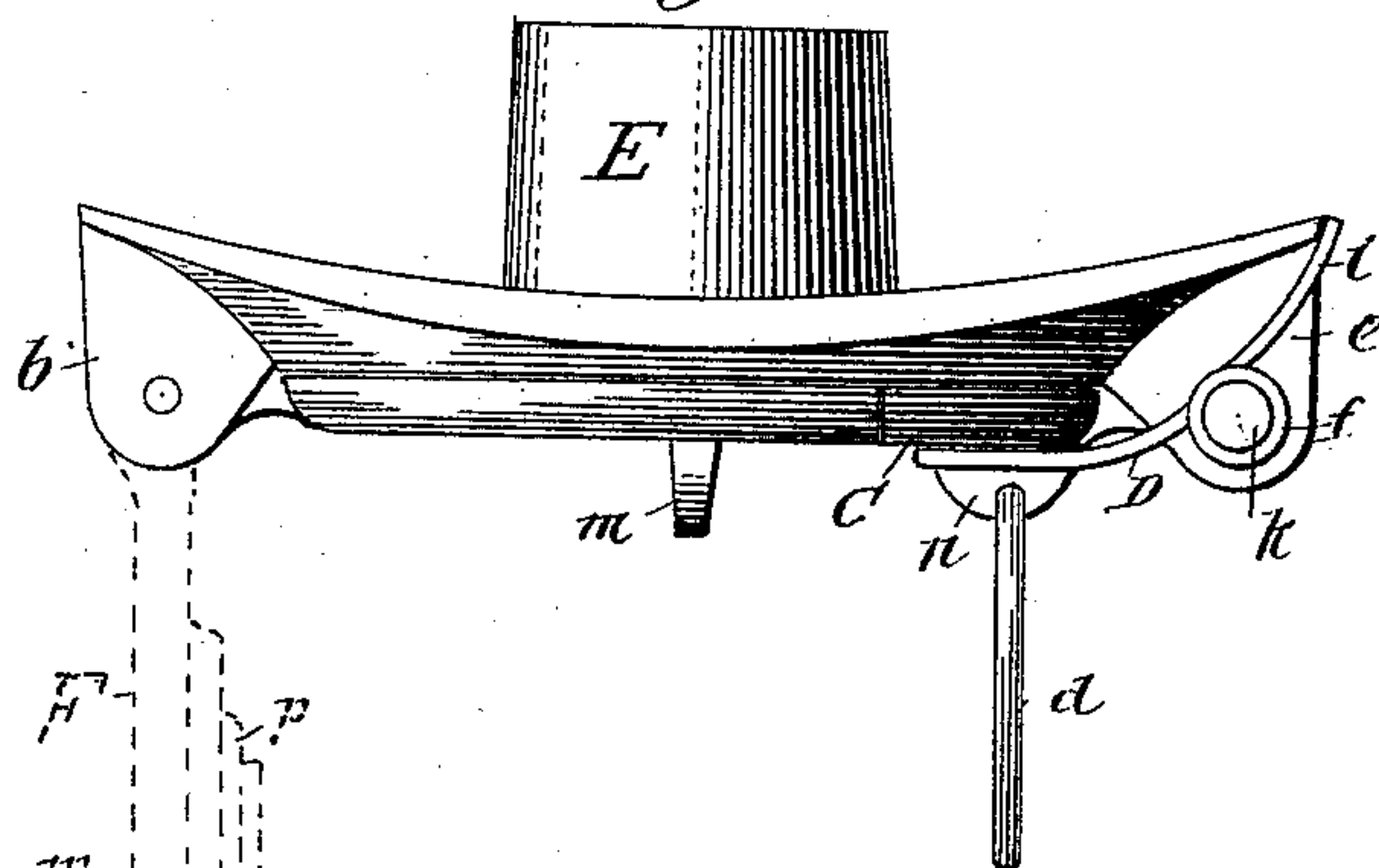
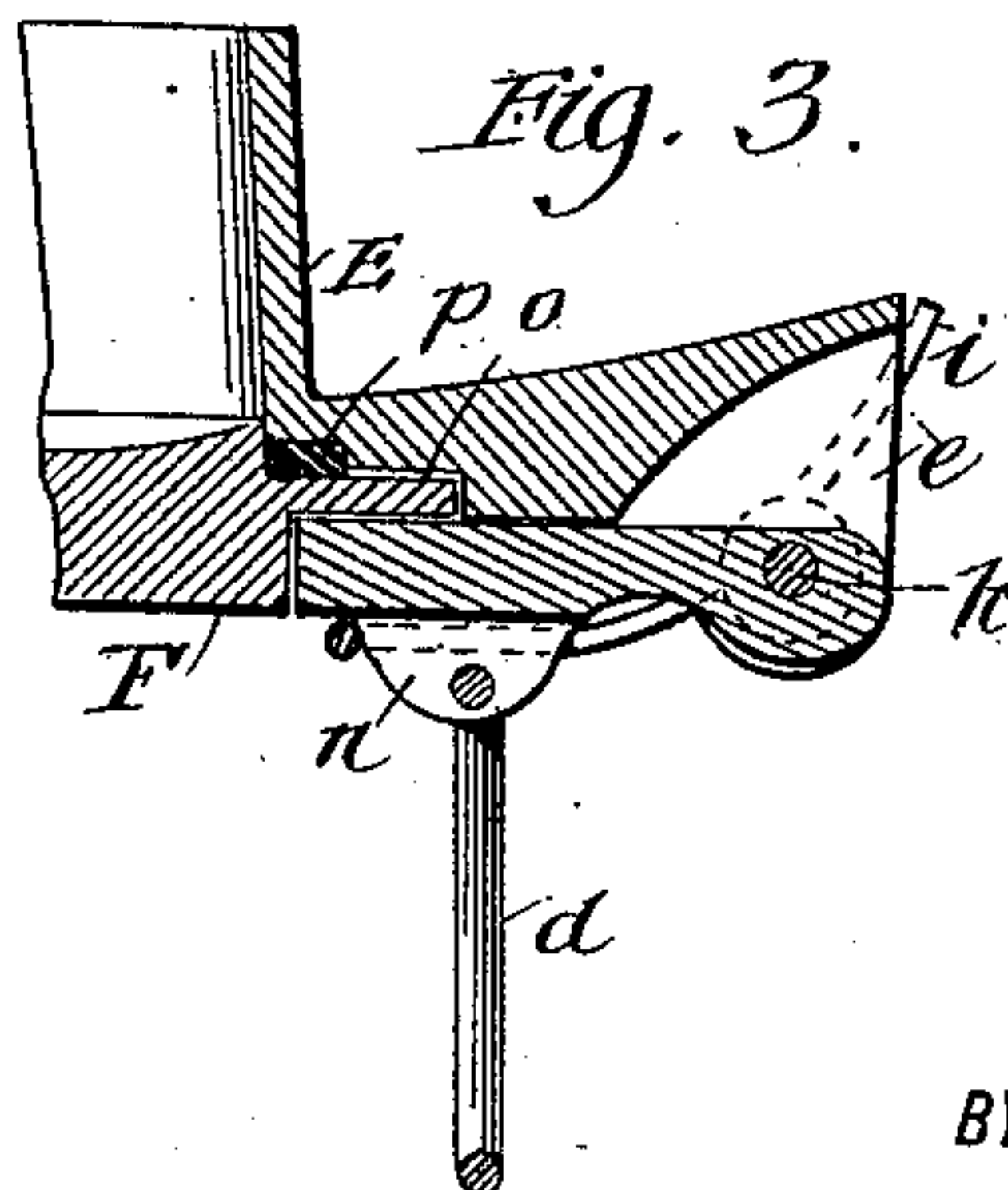


Fig. 3.



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SELF-SEALING BUNG FOR ICE-CREAM FREEZERS.

SPECIFICATION forming part of Letters Patent No. 410,800, dated September 10, 1889.

Application filed June 12, 1889. Serial No. 314,047. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL R. MAHER, of Zanesville, in the county of Muskingum and State of Ohio, have invented a new and
5 useful Improvement in Self-Sealing Bungs for Ice-Cream Freezers, of which the following is a full, clear, and exact description.

In the bung for which Letters Patent of the United States, No. 373,592, were granted to
10 me November 22, 1887, is shown a cap-plate, from which inwardly projects a thimble to enter the perforated wall of the ice-containing chamber of an ice-cream freezer. A hinged
15 gate is adapted to cover the thimble and thus seal the aperture. The hinged gate when closed is secured by a hinged overlapping plate, a turn-buckle or slide-bolt being employed to hold the overlapping plate in position upon the hinged gate.

20 It has been found in practice that the means provided for retaining the parts in closed adjustment do not render the sealing of the orifice absolutely secure, liability to become displaced being incidental to the plan of
25 securing the parts shown in the aforesaid patent.

In view of the foregoing statement, the object of my present invention is to further increase the efficiency of my patented bung
30 before mentioned, and render the sealing of the tap-hole or bung-orifice more secure when exposed to rough usage, incidental to handling and transportation of the portable freezer or its tub.

35 To carry into effect the object stated, my present invention consists in certain features of construction and combination of parts which will be hereinafter fully described, and pointed out in the claim.

40 Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a front view of the bung in
45 secured position on the lower portion of an ice-holding vessel for an ice-cream freezer. Fig. 2 represents an edge view of the self-sealing bung removed from the ice-holding vessel; and Fig. 3 is a view in section of part
50 of the device, showing the sealing-gate in place on the bung-plate, and a superimposed

clamping-plate and spring that bears upon the latter-named piece.

The metallic bung-plate A has its body curved to fit against the outer cylindrical
55 surface of the ice chamber or tub B. (See Fig. 1.) The location of the plate A is near the bottom of the tub or ice-chamber B, and, as shown, it is firmly fastened to this chamber by screws or other similar means. A short
60 tube or thimble E projects from the inner surface of the bung-plate A, of such length as to penetrate through the wall of the ice-chamber and produce a direct passage for
65 water to flow therefrom.

An annular recess or depression is formed around the orifice or tap-hole in the thimble E, which recess forms a seat for an elastic
70 packing-ring *p*, that is placed upon a projecting shoulder formed on the inner face of the gate F. Said gate is provided with a projecting lug *a*, which enters between parallel
75 ears *b* on the plate A, the ears and lug being perforated to receive a pintle *a'*, thus forming a hinged joint upon which the gate F
80 may be swung to open the water-passage through the thimble E, or hermetically seal it when the gate is closed. A thumb-piece *m* projects from the gate F, for convenience in opening the bung-orifice.

At a point directly opposite the hinge of the gate F two ears *e* are formed on the bung-plate A, for the reception of a boss *c*, which
85 latter is formed integral with the clamping-plate C, a transverse bolt or pin *k* being inserted through perforations made in the ears and boss. A hinge-joint is thus formed upon
90 which the plate C may be swung. As shown in Fig. 3, the plate C, when closed, has a bearing upon a reduced portion *o* of the gate F, so
95 that the closing down of the plate C will clamp the gate F and the ring *p* against the adjacent surface of the bung-plate A.

Such portions of the device as have been described are substantially similar to the
100 bung shown in the aforesaid Patent No. 373,592, and the novel feature of this invention consists in a spring appliance which engages the clamping-plate C and automatically closes it and holds it in such a position until
105 designedly released, as will now be explained.

The hinge-pin *k* is extended outside of the

ears *e* a proper distance, and upon these projecting ends the spirally-coiled ends of the looped wire spring *D* are mounted. The looped portion *g* of the spring *D* is extended
5 to pass over the projecting ears *n* integral with the top surface of the clamping-plate *C*, the looped portion of spring *D* being retained from lateral displacement by loose contact with the ears *n*. A ring *d* is introduced
10 through perforations made for its reception in the ears *n*, said ring being intended to serve as a handle for the clamping-plate *C* and to retain the loop on the ears *n*. The two free
15 ends *i* are extended from the spring-coils *f* downwardly to engage the edge of the bung-plate *A*, as shown, thus adapting the spring *D* to hold the clamping-plate *C* upon the gate *F*.

20 From the peculiar construction of the spring *D* and its location accidental displacement of the closed gate *F* is prevented and a

secure sealing of the same provided when the parts are returned to the normal position after the gate has been opened.

Having thus fully described my invention, I 25 claim as new and desire to secure by Letters Patent—

In a self-sealing bung, the combination, with a bung-plate provided with a thimble, a gate hinged to the bung-plate so as to close 30 the hole in the thimble, and a hinged clamping-plate which bears upon the gate when these parts are in closed adjustment, of a wire spring having spiral coils which engage the pintle of the clamp-plate hinge, and a loop 35 which bears upon the clamping-plate, whereby the said clamping-plate is normally held closed, substantially as set forth.

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Witnesses:

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